

EXHIBIT A

DECLARATION OF B. KENT HARRISON UNDER 37 CFR 1.132 ESTABLISHING SUFFICIENCY OF DISCLOSURE AND NOVELTY

I, B. Kent Harrison, acknowledge that any willful false statements made herein are punishable by fine or imprisonment or both, and that they jeopardize the validity of the application or any patent issuing thereon. All statements made herein are made of my own knowledge, and are true, and all statements made on information and are believed to be true.

1. I hereby declare that I am emeritus professor of physics at Brigham Young University. I received my Ph.D. in theoretical physics at Princeton University in 1959, and I have worked in the field of plasma containment for about ten years. I am, with Robert W. Bass and others, an inventor on United States Patent 4,236,964, titled "Confinement of High Temperature Plasmas" (Bass patent). While my principal area of research has been general relativity and gravitation, I had experience in plasma containment research at both Los Alamos Scientific Laboratory and Brigham Young University.

2. I have no interest, financial or otherwise, in the present invention (Application Number 10/804520), and have no relationship with the named inventors (W. Farrell Edwards and Eric. D. Held) or assignee institution (Utah State University) other than that of professional colleagues.


3. To understand and do substantive research in the field of plasma physics, particularly plasma containment, one must have a very high level of skill and training, generally requiring at minimum a Ph.D. in the field and in many cases years of post-graduate and professional experience.

4. It is common for experimentation to be necessary to carry out inventions or theories disclosed by papers or patents in the field of plasma containment.

5. In plasma containment, generally, the user determines the average number density of the plasma by using a housing with a known volume and inputting a known quantity of gas into the housing, which gas is then converted to a plasma. The plasma temperature can also be measured and is thereby known. The magnetic field is determined by the user by (in one example) controlling current in the toroidal coils and controlling the current induced in the plasma itself. These are factors that are commonly known and used in plasma containment apparatuses.

6. The principle of plasma quasi-neutrality when under the influence of a magnetic field is a long-standing and accepted convention of the physics of plasma containment. Up to this point, I have personally not been aware of any magnetic confinement, in a human-generated system, in a bulk-charge neutral plasma that results in a substantial separation of bulk distributions of ions and electrons over distances of many Debye lengths, thus violating the quasi-neutrality assumption. However, I have now read the Physical Review Letters article by Edwards and Held disclosing the invention, spoken with the principal inventor (Edwards), and have a basic knowledge of the invention. It is not at all like the device disclosed in the Bass patent. The cross section of the plasma is different, the magnetic field configuration is different, and the Bass patent device does not contemplate a charge separation, with attendant electric fields, as exists in the Edwards-Held invention.

Dated this 15th day of May 2006.


Dr. B. Kent Harrison